

Appl. No. 09/988,821

Amendment & Response to Office Action dated February 16, 2005

REMARKS/ARGUMENTS

Applicants amend claims 1 and 16. Claim 34 is added, and no claims are cancelled.

Hence, claims 1-34 remain pending.

Claim 16 and those dependent therefrom stand rejected under 35 U.S.C. 112. Claim 16 has been amended herein to address the concern, and Applicant respectfully requests withdrawal of the rejection.

Claims 1-10 and 13-33 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Morishige in view of Petersen when considering the Federal Highway Administration report/publication "Prevention and Control of Highway Tunnel Fires" (hereinafter FHA). Applicant respectfully traverses the rejection.

In addition, claims 1-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over United Kingdom reference 2,357,944 (hereinafter UK '944) in view of Petersen when considering any of Fischer or European reference 1,039,210 (hereinafter EU '210) or Japanese reference 9-322371 (herein after Japan '371). Applicant respectfully traverses the rejection.

Before addressing the rejections specifically, it should be noted that for a rejection to be proper it must consider each and every limitation of the claims. MPEP 2142. In this case, every element of the claims has not been considered. Accordingly, the rejection is not complete, and Applicant respectfully requests, if the Examiner deems it necessary in light of the arguments presented herein, issuance of a new non-final rejection carefully addressing each element of the claims.

Furthermore, while Applicant recognizes that it is difficult to ignore the teaching of the application under review, Applicant respectfully requests that in any further rejection, if such is necessary in light of the arguments presented herein, that the references utilized "be viewed

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without the impermissible hindsight vision afforded by the claimed invention.” MPEP 2141. In the present case, among other instances, the rejection states that “[e]ach of Fischer, [EU ‘210], and [Japan ‘371] teach utilization of a conduit to lay cables within an underwater environment with [Japan ‘371] and [EU ‘210] teaching use of multiple conduits . . .” This position is unsupported by the cited sections of the reference, and is only supported by the teachings of Applicant’s patent.

While the rejection is incomplete and improper, Applicant respectfully submits the following arguments in an effort to prosecute the application in a timely fashion. MPEP 2142 (if a prima facie case is not established, the applicant is under no obligation to submit evidence of nonobviousness).

Rejection Based on Petersen, Morishige and FHA

At the outset, it should be noted that it is not readily apparent that the FHA reference was publicly available prior to the filing date of the present application. Accordingly, Applicants respectfully request that the prior art status of the FHA reference be established before it is utilized in any further rejection of Applicants’ claims. Without waiving any objection to the FHA reference and in an effort to prosecute the application in a timely fashion, Applicant addresses the insufficiency of the FHA reference assuming it is prior art, which it has not been established to be.

In the Examiner’s Answer of August 27, 2004, the rejection of the claims based on Peterson in view of Morishige was withdrawn. In particular, the aforementioned Answer noted that “Peterson as modified by Morishige does not fairly teach application of a duct or plurality of ducts within which communication cables extend from one point to a second offshore point.”

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Examiner's Answer of August 27, 2004 at p. 2. As the aforementioned references are admittedly insufficient, a prima facie case was not found and the rejection was withdrawn.

In the present Office Action (Office Action of 2/26/05), a rejection based on the same combination of Morishige and Peterson, but further in light of the Federal Highway Administration report/application "Prevention and Control of Highway Tunnel Fires" (FHA) is presented. Of note, FHA like Morishige and Petersen fails to disclose, teach or suggest "application of a duct or a plurality of ducts within which communication cables extend from one point to a second offshore point." Rather, all FHA discloses is the possibility of telephones, alarms and TV surveillance being used within a tunnel. FHA is silent on how those devices are deployed, and as such it should not be surprising that it does not disclose, teach or suggest the element, *inter alia*, what was admittedly missing from the prior rejections using the same art. Thus, even were a combination of Morishige, Peterson and FHA proper, which it is not, the combination still fails to render Applicants' independent claims obvious. Accordingly, Applicants respectfully request allowance of the aforementioned independent claims for at least this reason. Claims 2-15, 17-24, and 26-32 properly depend from one of the aforementioned independent claims and are thus allowable for at least this reason.

In addition, the references relied upon in rejecting the claims are not properly combinable. In particular, the references are not properly combined where the principle of operation of either of the cited references is wholly changed where the references are combined. Of course, where the proposed modification or combination changes the principle of operation of the prior art, then the teachings of the references are not sufficient to render the claims *prima facie* obvious. MPEP §2143.01 ("If the proposed modification or combination of the prior art

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would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious”).

Here the rejection proposes combining an underwater automobile tunnel of Morishige with a method for burying communication cable of Peterson. The combination would require mounting massive cylinders, in some inconceivable manner, on a remote controlled and self-propelled sea plough for burying in the sea bed. This flies in the face of both references, as well as reason. First, the purpose of Morishige is to provide a method of manufacturing cylindrical sections at sea because they are too large to build on land (twenty meters in diameter by three hundred meters in length). See e.g., Morishige at abstract; col. 27, l. 60 – col. 28, l. 13. Thus, the combination requiring that the sections be mounted on an initially land based sea plough as taught by Peterson completely changes the principle of Morishige. Second, Peterson provides a method for burying flexible conduit in the seabed using a self propelled remote controlled sea plough. See e.g., Peterson at abstract. The conduit must be flexible to facilitate being carried by the sea plough and unrolled onto the sea bed. Replacing the flexible conduit with the massive inflexible cylinders of Morishige not only changes the principle of Peterson, but actually renders Peterson completely inoperable. Thus, for at least this additional reason the rejection relying on Morishige, Petersen and FHA should be withdrawn and the claims allowed.

In addition, one of ordinary skill in the art would not look to a method for constructing an underwater automobile tunnel (i.e., Morishige) or for preventing and controlling highway tunnel fires (FHA) for insight in how to provision a point-to-point cable connection. Said another way, the construction of automobile tunnels and the prevention of fires is neither in the field of endeavor as set forth in Appellant's claims, nor disclosure teaching installation of massive cylinders on the seabed pertinent to the particular problem with which applicants are concerned.

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MPEP § 2141.01(a); *see also, In re Clay*, 966 F.2d 656, 23 U.S.P.Q.2d 1058 (Fed. Cir. 1992) (“A reference is reasonably pertinent if . . . [it] logically would have commended itself to an inventor’s attention in considering his problem.”). Again, for at least this additional reason the rejections based on Morishige, Petersen and FHA should be withdrawn and the claims allowed.

Rejection Based on UK ‘944, Petersen, Fischer, EU ‘210 and Japan ‘371

Similarly, Applicant respectfully points out that the rejection based on UK ‘944, Petersen, Fischer, EU ‘210 and Japan ‘371 fails to set forth a prima facie case of obviousness. As amended, claim 1 provides a method of facilitating provision of a point-to-point cable connection between first and second points separated by an extended span of water including a first region of shallow water and a second region of relatively deep water including, *inter alia*, providing a plurality of ducts wherein the plurality of ducts are combined to form a multiple duct conduit. In stark contrast, UK ‘944 discloses a single duct, and does not disclose, teach or suggest a multiple duct approach. Using this single duct, cables may be transitioned from sea to shore without requiring traditional processes associated with landing a cable taught by Petersen.

In particular, Petersen discloses “a method and device for continuously laying and burying flexible submarine conduit”. Peterson at col. 1, ll. 5-7. The method disclosed in Peterson includes stretching a cable “between two sites on land separated by a stretch of water”, or between on offshore site and a site on land. Id. at col. 2, ll. 16-18; col. 6, l. 66 – col. 7, l. 7. Both approaches include repeating the underwater laying process in the vicinity of the shore, which is one of the problems avoided by using the method of claim 1. In particular, Peterson expressly teaches using a single duct conduit being laid by a remote controlled and self-propelled sea plough beginning “with a first step of laying and burying the cable on land.” Id. at col. 3, l.

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67 – col. 4, l. 1. Again, in stark contrast to claim 1, Petersen is a single duct and does not provide disclosure, teaching or suggestion to use the multiple duct approach of claim 1.

Of note, the purpose of UK '944 is to eliminate the need for the landing processes disclosed by Petersen. Thus, rather than suggesting a combination with Petersen, UK '944 actually teaches away from any combination. As such, the suggested combination of Petersen and UK '944 is not proper and Applicant respectfully requests that the rejection be withdrawn based at least on the improper combination.

The rejection relies upon one of Fischer, EU '210 or Japan '371 to cure the aforementioned defect in the improper combination of UK '944 and Petersen. In doing so, the rejection fails to identify sufficient motivation or suggestion to combine the references. It is well established that any proposed combination must be suggested by the prior art. MPEP 2143.01. Thus, although a prior art device “may be capable of being modified to [operate in accordance with the claim], there must be a suggestion or motivation in the reference to do so.” *Id.* In this case, the rejection merely relies on an unsupported conclusion that “assuring a well protected communication line . . . would have been a further obvious expedient to one having ordinary skill in the art . . . as taught by any of” Fischer, EU '210 or Japan '371. Even if this was supported, and the rejection fails to identify such support, it still would not support a combination of the cited art in any way that renders Applicants' claim obvious. Hence, Applicant respectfully requests that the rejection of claim 1 be withdrawn, and the claim allowed for at least the aforementioned reasons. All other claims either include a similar limitation as that discussed above in relation to claim 1, or are properly dependent from an independent claim including such a limitation. Accordingly, for at least the aforementioned reasons, Applicants respectfully request withdrawal of the rejections of the other claims, and allowance thereof.

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Finally, claim 34 is added. Claim 34 is allowable at least because it properly depends from an allowable independent claim.

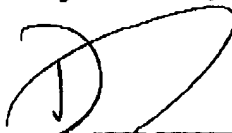
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CONCLUSION

In view of the foregoing, Applicants submit that all claims now pending in this Application are in condition for allowance. Therefore, an early Office Action to that effect is earnestly solicited. If the Examiner believes a telephone conference would aid in the prosecution of this case in any way, please call the undersigned at 303-607-3747.

Dated: June 13, 2005

Respectfully Submitted,



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